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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/082,870	02/25/2002	Mark J. Schnitzer	5	6317

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Docket Administrator (Room 3J-219)
Lucent Technologies Inc.
101 Crawfords Corner Road
Holmdel, NY 07733-3030

EXAMINER

KISH, JAMES M

ART UNIT PAPER NUMBER

3737

DATE MAILED: 12/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/082,870

Applicant(s)

SCHNITZER, MARK J.

Examiner

James Kish

Art Unit

3737

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-2, 5 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Nishigaki et al. (US Patent No. 4,905,082). Nishigaki discloses a rigid endoscope which can be inserted into a hollow organ to provide image signals relating to a portion to be observed (column 5, lines 24-34). One end surface of the optical system serves as a light entrance face and the light is transferred to the other end surface, serving as a light exit face. A color mosaic filter separates the optical image formed on the imaging surface into three color elements (column 5, line 56 through column 6, line 18). In one embodiment, shown in Figure 11, the objective lens system and the relay optical system are constituted by a single gradient index lens, such as a so-called SELFOC lens (column 10, lines 18-26). Reflected light of each color are observed from the area of examination via an image area of an imaging chip (column 11, lines 46-53). Column 17,

Art Unit: 3737

lines 32-35 discuss an objective lens system used in one embodiment, which comprises a prism.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 9-11, 13-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishigaki et al. in view of Tani et al. (US Patent No. 6,108,094). Nishigaki discloses a rigid endoscope which can be inserted into a hollow organ to provide image signals relating to a portion to be observed, as described in the rejection of claims 1-2, 5 and 12. However, Nishigaki does not disclose changing an incidence angle of light in order to perform a scanning function. Tani teaches an apparatus for spectroscopy including a rod-shaped lens having an index of refraction distribution gradient and capable of having a sample at one end surface thereof, an element for projecting a laser beam into the rod-shaped lens from another end surface. A scanner varying the incidence angle of the laser beam to scan the focal point two-dimensionally on the one end surface is discussed (see Abstract). The laser can be pulsed, as described at column 4, lines 53-56. Also see column 4, lines 28-44, where Tani teaches the varying of the angle of incidence as well as determining positional data regarding the focal point to represent the results of the measurement as a two-dimensionally scanned image. It

Art Unit: 3737

would have been obvious to one having ordinary skill in the art at the time the invention was made to use the technique of varying the angle of incidence, as taught by Tani, in the system of Nishigaki because it is then possible to pre-select specific points within the image obtained by imaging with the optical apparatus and then to measure the spectra of the individual structures at this point (column 4, lines 45-48).

3. Claims 3-4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishigaki et al. in view of Brown et al. (US Patent No. 5,396,366). Nishigaki discloses a rigid endoscope which can be inserted into a hollow organ to provide image signals relating to a portion to be observed, as described in the rejection of claims 1-2, 5 and 12. However, Nishigaki does not specifically disclose pitch values of the GRIN lenses. Brown teaches an endoscope designed to transmit light to an area under observation and allows the light to make contact with the image plane, without the need of a fiber optic bundle. Brown uses a gradient index rod lens with a pitch of $1.75 p$ (diameter \times pitch) and another GRIN lens with a pitch of $0.25 p$. Therefore, the system has a total pitch of $2.0 p$ (column 3, line 66 through column 4, line 8). It would have been obvious to one having ordinary skill in the art to use lenses with the dimensions as taught by Brown in order to provide the best image resolution (column 4, lines 6-8).

4. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nishigaki et al. in view of Prescott et al. (US Patent No. 4,641,927). Nishigaki discloses a rigid endoscope which can be inserted into a hollow organ to provide image signals relating

Art Unit: 3737

to a portion to be observed, as described in the rejection of claims 1-2, 5 and 12.

However, Nishigaki does not disclose a third lens being positioned next to the relay lens. Prescott teaches providing a homogenous lens coupled to the relay lens opposite the end of the relay GRIN lens as the objective GRIN lens. See Figures 2 and/or 9a-c.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to add a lens at this location in order to correct axial chromatic aberrations (column 6, lines 48-67).

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nishigaki et al. in view of Prescott et al, further in view of Tani et al. Nishigaki and Prescott disclose a rigid endoscope, which can be inserted into a hollow organ to provide image signals relating to a portion to be observed, as described in the rejection of claim 7. However, neither reference discloses using a pulsed laser. Tani teaches using a pulsed laser at column 4, lines 53-56. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a pulsed laser because the rod-shaped lens is much shorter than an optical fiber.

Conclusion

Other related art:

Prescott et al.	4,515,444
Takahashi	4,735,491

Art Unit: 3737

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Kish whose telephone number is 571-272-5554. The examiner can normally be reached on 8:30 - 5:00 ~ Mon. - Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 571-272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JMK


BRIAN L. CASLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700